

Rec'd PCT/PTC 05 DEC 2005  
1733972

Attorney Docket No.: 40853-01-5083-US01  
Client Ref. No.: NEO00265US

PTO/SB/01A (10-00)

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
USING AN APPLICATION DATA SHEET (37 CFR 1.76)**

**Title: ERYTHROPOIETIN: REMODELING AND GLYCOCONJUGATION OF ERYTHROPOIETIN**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or
- ☒ Int'l. Application No., **PCT/US2003/031974**, filed on **October 8, 2003**,
- ☒ Application No. **10/530,972**, filed on **April 11, 2005**,
- ☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**

Inventor one Shawn DeFrees Date: 10/25/2005

Signature: [Signature] Citizen of: United States

Inventor two David A. Zopf Date: 10/25/05

Signature: [Signature] Citizen of: United States

Inventor three Robert J. Bayer Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: United States

Inventor four David James Hakes Date: 10/26/05

Signature: [Signature] Citizen of: United States

☒ Additional inventors are being named on 1 additional form(s) attached hereto.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
USING AN APPLICATION DATA SHEET (37 CFR 1.76)**

**Title:** ERYTHROPOIETIN: REMODELING AND GLYCOCONJUGATION OF ERYTHROPOIETIN

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or
- ☒ Int'l. Application No., **PCT/US2003/031974**, filed on **October 8, 2003**,
- ☒ Application No. **10/530,972**, filed on **April 11, 2005**,
- ☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**

Inventor one Shawn DeFrees Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: United States

Inventor two David A. Zopf Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: United States

Inventor three Robert J. Bayer Date: Nov 10, 2005

Signature: Robert J. Bayer Citizen of: United States

Inventor four David James Hakes Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: United States

☒ Additional inventors are being named on 1 additional form(s) attached hereto.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
USING AN APPLICATION DATA SHEET (37 CFR 1.76) –  
ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
(Total of 2 forms are submitted.)**

FULL NAME OF INVENTOR(S)

5<sup>th</sup>  
Inventor 1: Caryn Bowe

Date: 10/27/05

Signature: Caryn Jay Bowe

Citizen of: United States

6<sup>th</sup>  
Inventor 2: Xi Chen

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Citizen of: The Peoples Republic of China

Inventor 3: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Citizen of: \_\_\_\_\_

Inventor 4: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Citizen of: \_\_\_\_\_

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
USING AN APPLICATION DATA SHEET (37 CFR 1.76) –  
ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
(Total of 2 forms are submitted.)**

FULL NAME OF INVENTOR(S)			
Inventor 1:	Caryn Bowe	Date:	
Signature:		Citizen of:	United States
Inventor 2:	Xi Chen	Date:	10/31/2005 ✓
Signature:	Chen Xi	✓ Citizen of:	The Peoples Republic of China
Inventor 3:		Date:	
Signature:		Citizen of:	
Inventor 4:		Date:	
Signature:		Citizen of:	



Rec'd PCT/PTO 05 DEC 2005  
Neo 00265 US  
10/530972

Please place a plus sign (+) inside this box →

PTO/SB/81 (02-01)  
Approved for use through 10/31/2002. OMB 0651-0035  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>POWER OF ATTORNEY OR AUTHORIZATION OF AGENT</b>	<b>Application Number</b>	10/530,972
	<b>Filing Date</b>	April 11, 2005
	<b>First Named Inventor</b>	DeFrees, Shawn
	<b>Title</b>	Erythropoietin: Remodeling And Glycoconjugation Of Erythropoietin
	<b>Group Art Unit</b>	Not Yet Assigned
	<b>Examiner Name</b>	Not Yet Assigned
	<b>Attorney Docket Number</b>	40853-01-5083-US01

I hereby appoint:

☒ Practitioners at Customer Number  
OR

43850

Place Customer  
Number Bar Code  
Label here

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☒ The above-mentioned Customer Number.  
OR

☐ Firm or  
Individual Name

Address

City

State

ZIP

Country

Telephone

Fax

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

**SIGNATURE of Applicant or Assignee of Record**

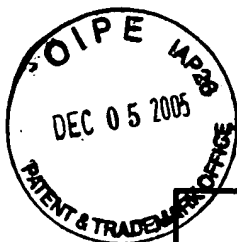
<b>Name</b>	Debra Poul, Esq., Senior Vice President, General Counsel and Secretary
<b>Signature</b>	
<b>Date</b>	11/10/05

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any Comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

1-SF/7298924.1



Rec'd PCT/PTC 05 DEC 2005  
10/530972

PTO/SB/96 (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.  
Attorney Docket No. 040853-01-5083-US01  
NEO00265US

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Shawn DeFreees, et. al.

Application No./Patent No.: 10/530,972

Filed/Issue Date: April 11, 2005

Entitled: ERYTHROPOIETIN: REMODELING AND GLYCOCONJUGATION OF ERYTHROPOIETIN

Neose Technologies, Inc., a Delaware corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

**[NOTE:** A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8]

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

11/10/05  
Date

Debra J. Poul  
Signature

Debra J. Poul, Esq.

Typed or printed name

Senior Vice President, General Counsel and Secretary

Title

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office.

COPY AS SENT TO THE USPTO FOR RECORDATION

Attorney Docket No.: 040853-01-5083-US01

Client Reference No.: NEO00265US

### ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Shawn DeFrees, 126 Filly Drive, North Wales, PA 19454, David A. Zopf, 560 Beechtree Lane, Wayne, PA 19087, Robert J. Bayer, 6105 Dirac Street, San Diego, California 92122, David James Hakes, 14 Fern Avenue, Willow Grove, PA 19090, Caryn Bowe, 276 Cherry Lane, Doylestown, Pennsylvania 18901, and Xi Chen, 107 Whitney Place, Lansdale, PA 19446 hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified patent application:

Title of Invention:	ERYTHROPOIETIN: REMODELING AND GLYCOCONJUGATION OF ERYTHROPOIETIN
Filing Date:	April 11, 2005
Application No.:	10/530,972; and


WHEREAS, Neose Technologies, Inc., located at 102 Witmer Road, Horsham, PA 19044, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on any patent application claiming priority from the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on any patent application claiming priority from the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that Assignors will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

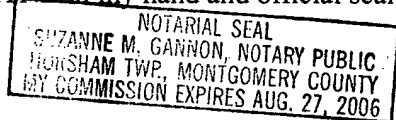
Assignors hereby authorize and request Morgan, Lewis & Bockius LLP, One Market, Spear Street Tower, San Francisco, CA 94105, to insert herein above the application number and filing date of said application when known.


Dated: 10/25/2005

  
SHAWN DEEREES

[illegible]


WITNESS my hand and official seal.



  
NOTARY PUBLIC

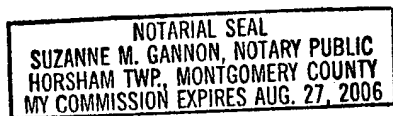
My Commission Expires: \_\_\_\_\_

Dated: 10/25/05

  
DAVID A. ZOPF

[illegible]

WITNESS my hand and official seal.



Alyzanne Gannon  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

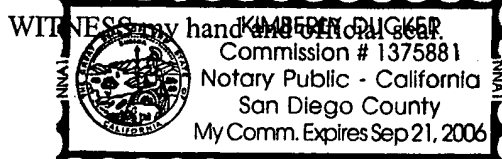


Dated: \_\_\_\_\_ ✓

✓ Robert J. Bayer  
ROBERT J. BAYER

STATE OF CALIFORNIA )  
COUNTY OF San Diego ) ss.

On Oct 28, 2005, before me, Kimberly Ducker, personally appeared Robert J. Bayer, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he she executed the same in his her authorized capacity, and that by his her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.



My Commission Expires: Sept 21, 2006

Kimberly Ducker  
NOTARY PUBLIC

Dated: \_\_\_\_\_

\_\_\_\_\_  
DAVID JAMES HAKES

STATE OF PENNSYLVANIA )  
COUNTY OF \_\_\_\_\_ ) ss.

On \_\_\_\_\_, before me, \_\_\_\_\_ personally appeared David James Hakes, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
NOTARY PUBLIC

Dated: \_\_\_\_\_

\_\_\_\_\_  
ROBERT J. BAYER

STATE OF CALIFORNIA       )  
  ) ss.  
COUNTY OF                       )

On \_\_\_\_\_, before me, \_\_\_\_\_ personally appeared Robert J. Bayer, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

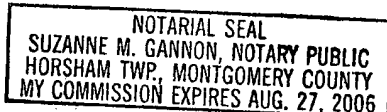
Dated: 10/26/05

David James Hakes  
\_\_\_\_\_  
DAVID JAMES HAKES

STATE OF PENNSYLVANIA       )  
  ) ss.  
COUNTY OF                       )

On 10/26/2005 before me, Suzanne Gannon personally appeared David James Hakes, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



Suzanne Gannon  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Assignment

Attorney Docket No.: 040853-01-5083-US01

Page 4

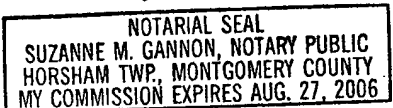
Dated: 10/27/2005

Caryn Lane Rowe  
CARYN ROWE

STATE OF PENNSYLVANIA )  
COUNTY OF Montgomery ) ss.

On 10/27/2005, before me, Suzanne Gannon personally appeared Caryn Rowe, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



Suzanne Gannon  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Dated: \_\_\_\_\_

\_\_\_\_\_  
XI CHEN

STATE OF )  
COUNTY OF ) ss.

On \_\_\_\_\_, before me, \_\_\_\_\_ personally appeared Xi Chen, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Dated: \_\_\_\_\_

\_\_\_\_\_  
CARYN BOWE

STATE OF PENNSYLVANIA     )  
  ) ss.  
COUNTY OF                     )

On \_\_\_\_\_, before me, \_\_\_\_\_ personally appeared Caryn Bowe, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_

Dated: 10/31/2005 ✓

Chen Xi ✓  
XI CHEN

STATE OF                     )  
  ) ss.  
COUNTY OF                 )

On \_\_\_\_\_, before me, \_\_\_\_\_ personally appeared Xi Chen, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_